WHAT IS CLAIMED IS:

1. A biomolecular carrier of pharmaceuticals, comprising:

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a biomolecule carrier bearing molecules that bind to a cellular adhesion molecule expressed on endothelial cell; and

a pharmaceutical.

2. The biomolecular carrier of claim 1, wherein said molecules that bind to a cellular adhesion molecule is selected from the group consisting of antibodies, antibody fragments and ligands that bind to said cellular adhesion molecule.

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3. The biomolecular carrier of claim 1, wherein said carrier is made from a substance selected from the group consisting of biodegradable particles, liposomes, microbubbles, polymersomes, and synthetic secretory granules.

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4. The biomolecular carrier of claim 1, wherein said cellular adhesion molecule is selected from the group consisting of ICAM-1, E-selectin, P-selectin, VCAM-1, and PECAM-1.

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5. The biomolecular carrier of claim 1, wherein said pharmaceutical is an anti-neoplastic compound.

6. A method of treating a pathophysiological state in an individual in need of such treatment, comprising the steps of:

irradiating a target tissue or organ in said individual; and administering to said individual the biomolecular carrier of claim 1.

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7. The method of claim 6, wherein said pathophysiological state is selected from the group consisting of cancer, arteriovenous malformations (AVM), macular degeneration and restenosis.

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